WEST Search History

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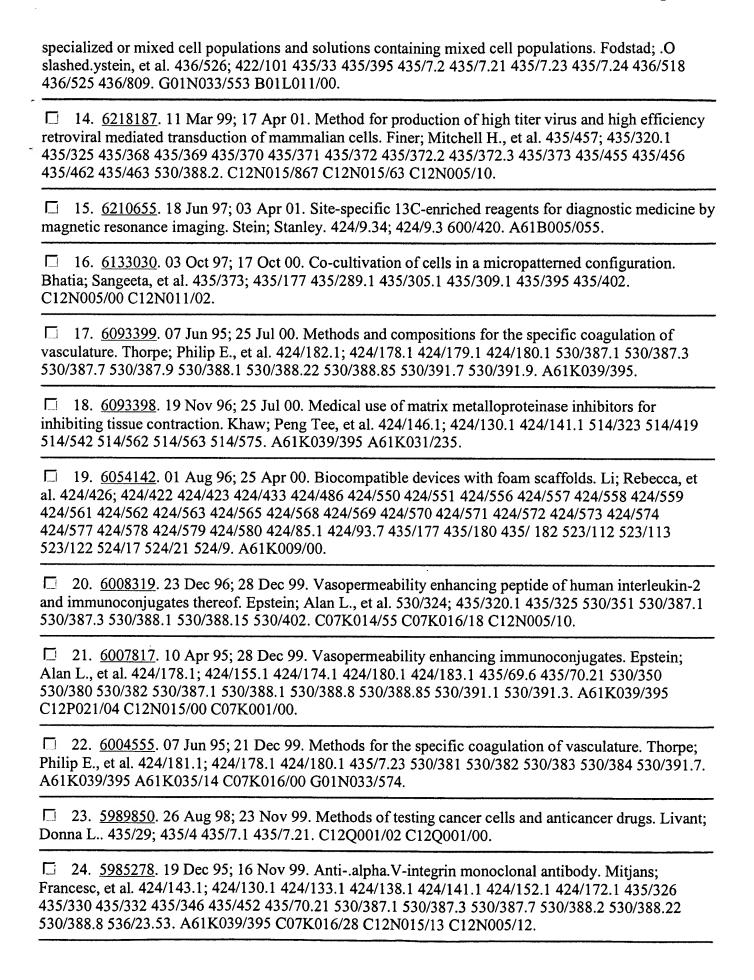
k DATE:	Thursd	ay, May 13, 2004	
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	L1	neri.in.	289
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	L3	fibronect\$	6267
	L4	domain or region or portion or moiety or moieties or fragment or subfragment or sub-fragment or section or peptide or epitope	2656412
	L5	L4 same 13	2763
	L6	L5 same (scfv or sc-fv or fv or monoclonal or hybridoma or chimeric or chimera or humanized or construct or antibodies or antibody)	786
	L7	L6 and (extra or angiogenesis or tumor or vasculature or extracellular or foetal or ed or edb or ed-b)	759
	L8	L6 and (angiogenesis or tumor or vasculature or extracellular or foetal or edb or ed-b)	715
	L9	L6 and (angiogenesis or tumor or extracellular or foetal or edb or ed-b)	711
	L10	L6 same (extra or angiogenesis or tumor or vasculature or extracellular or foetal or ed or edb or ed-b)	357
	L11	L6 same (extra or angiogenesis or tumor or extracellular or foetal or edb or ed-b)	328
	L12	L6 same (angiogenesis or tumor or extracellular or foetal or edb or ed-b)	321
	L13	L6 same (angiogenesis or tumor or foetal or edb or ed-b)	129
	L14	L3.clm.	726
<u></u>	L15	L4.clm.	1441895
	L16	L15 and 114	346
	L17	L16 and (scfv or sc-fv or fv or monoclonal or hybridoma or chimeric or chimera or humanized or construct or antibodies or antibody or single-chain or single-chain or (single near chain)).clm.	102
Γ	L18	(angiogenesis or tumor or vasculature or extracellular or foetal or edb or edb).clm.	9892
	L19	L18 and 117	39

END OF SEARCH HISTORY



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1. <u>6696276</u> . 13 Jan 03; 24 Feb 04. Vasopermeability-enhancing conjugates. Epstein; Alan L., et al. 435/69.6; 424/178.1 530/382. C12P021/04 A61K039/44 C07K017/00.
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Terms	Documents
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L19: Entry 1 of 39

File: USPT

Feb 24, 2004

- US-PAT-NO: 6696276

DOCUMENT-IDENTIFIER: US 6696276 B2

TITLE: Vasopermeability-enhancing conjugates

DATE-ISSUED: February 24, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Epstein; Alan L. La Canada CA Glovsky; Michael Los Angeles CA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

University of Southern California Los Angeles CA 02

APPL-NO: 10/ 342426 [PALM]
DATE FILED: January 13, 2003

PARENT-CASE:

RELATION TO RELATED APPLICATION This application is a continuation of U.S. patent application Ser. No. 09/916,883, now U.S. Pat. No. 6,524,823, filed on Jul. 27, 2001, which is a continuation of U.S. patent application Ser. No. 09/382,359, now U.S. Pat. No. 6,274,343, filed on Aug. 24, 1999, which is a continuation of U.S. patent application Ser. No. 08/419,645, now U.S. Pat. No. 6,007,817, filed on Apr. 10, 1995, which is a continuation of U.S. patent application Ser. No. 08/127,988, filed on Sep. 27, 1993, abandoned, which is a continuation of U.S. patent application Ser. No. 07/964,517, filed on Oct. 21, 1992, abandoned, which is a continuation of U.S. patent application Ser. No. 07/417,782, filed on Oct. 4, 1989, abandoned, which is a continuation-in-part of U.S. patent application Ser. No. 07/255,513, filed on Oct. 11, 1988, abandoned. Each of the above mentioned patents is incorporated by reference herein, in its entirety.

INT-CL: [07] C12 P 21/04, A61 K 39/44, C07 K 17/00

US-CL-ISSUED: 435/69.6; 424/178.1, 530/382 US-CL-CURRENT: 435/69.6; 424/178.1, 530/382

FIELD-OF-SEARCH: 435/69.6, 424/178.1, 530/382

PRIOR-ART-DISCLOSED:

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Search ALL Clear

Record Display Form Page 2 of 4

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· 🗀	4673573	June 1987	Ferres et al.	
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ART-UNIT: 1648

PRIMARY-EXAMINER: Park; Hankyel T.

ATTY-AGENT-FIRM: Knobbe Martens Olson & Bear LLP

ABSTRACT:

Liposomal conjugates having a clinically useful delivery vehicle linked to a biologically active species which acts to increase vascular permeability and expand blood volume at or in proximity to the tumor site are disclosed. The vehicle-linked species may be, for example, a vasoactive agent, a substance that recruits or amplifies a vasoactive species, a drug, or a pharmaceutical compound. Suitable biological species comprises peptides, lipids, carbohydrates, or their derivatives. Chemical or recombinant DNA methods suitable for linking the species to the vehicles vehicles are indicated. A therapy is disclosed which comprises administering the vasoactive conjugate and delivering a diagnostic agent or a therapeutic agent at an optimal time thereafter, when tumor vasculature is maximally affected.

18 Claims, 4 Drawing figures

L19: Entry 15 of 39 File: USPT Apr 3, 2001

DOCUMENT-IDENTIFIER: US 6210655 B1

TITLE: Site-specific 13C-enriched reagents for diagnostic medicine by magnetic

resonance imaging

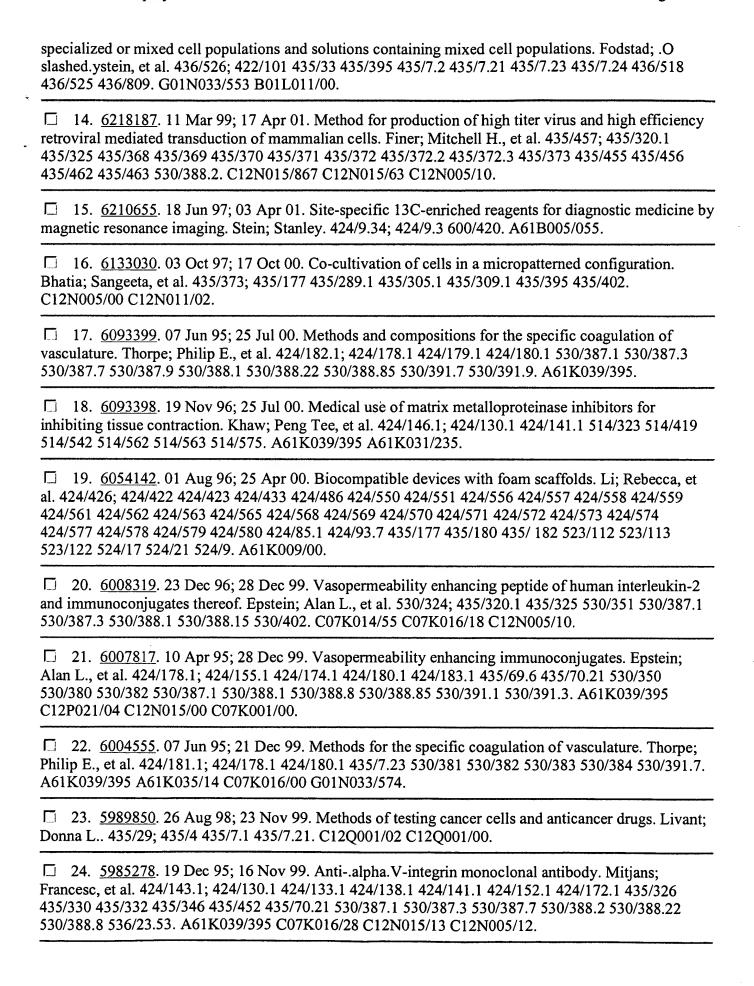
CLAIMS:

- 2. The magnetic resonance imaging reagent according to claim 1, wherein the site-specific targeting group is an organic compound, <u>peptide</u>, or protein selected from the group consisting of polyclonal <u>antibodies</u>, <u>monoclonal antibodies</u>, <u>single chain antibodies</u>, and Fab fragments.
- 3. The magnetic resonance imaging reagent according to claim 2, wherein the site-specific targeting group is selected from the group consisting of blood clot targeting groups, .beta.-amyloid plaque targeting groups of Alzheimer's disease, Congo red, and tumor-specific antigen targeting groups.
- 4. The magnetic resonance imaging reagent according to claim 2, wherein the site-specific targeting group is selected from the group consisting of antifibrin monoclonal antibodies, fibrin-binding domain fragment of fibronectin, activated-platelet binding protein fragment, and inactivated tissue plasminogen activator.
- 7. The magnetic resonance imaging reagent according to claim 3, wherein the site-specific targeting group is a .beta.-amyloid peptide of Alzheimer's disease.
- 9. The method according to claim 8, wherein the site-specific targeting group is an organic compound, peptide, or protein selected from the group consisting of polyclonal antibodies, monoclonal antibodies, single chain antibodies, and Fab fragments.
- 10. The method according to claim 9, wherein the site-specific targeting group is selected from the group consisting of blood clot targeting groups, .beta.-amyloid plaque targeting groups of Alzheimer's disease, Congo red, and tumor-specific antigen targeting groups.
- 11. The method according to claim 9, wherein the site-specific targeting group is selected from the group consisting of antifibrin monoclonal antibodies, fibrin-binding domain fragment of fibronectin, activated-platelet binding protein fragment, and inactivated tissue plasminogen activator.
- 14. The method according to claim 10, wherein the site-specific targeting group is a .beta.-amyloid peptide of Alzheimer's disease.

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☐ 3. <u>6666893</u> . 28 Mar 01; 23 Dec 03. Absorbable tissue expander. Burg; Karen J. L., et al. 623/23.75; 623/23.64 623/23.67 623/23.76 623/8. A61F002/02.
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☐ 6. <u>6582391</u> . 02 Jul 02; 24 Jun 03. Hybrid matrix implants and explants. Mineau-Hanschke; Rochelle. 604/19; 424/93.1 424/93.21 435/289.1 435/297.1 435/325 435/382 604/5.01 604/890.1. A61N001/30 A61M037/00 A61K009/22 A61K048/00 C12N005/00.
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11. 6379667. 03 Aug 99; 30 Apr 02. Medical use of matrix metalloproteinase inhibitors for inhibiting tissue contraction. Khaw; Peng Tee, et al. 424/146.1; 424/141.1 514/575. A61K039/395 A61K013/19.
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13 6265229 04 Nov 96: 24 Jul 01 Method and device for detection of specific target cells in



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L19: Entry 17 of 39

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Jul 25, 2000

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DATE-ISSUED: July 25, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Thorpe; Philip E. Dallas TX Edgington; Thomas S. La Jolla CA

ASSIGNEE-INFORMATION:

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Board of Regents, The University of Austin TX 02

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The present application is a continuation-in-part of U.S. patent application Ser. No. 08/273,567 (ABN), filed Jul. 11, 1994; which is a continuation-in-part of U.S. patent application Ser. No. 08/205,330, filed Mar. 2, 1994; which is a continuation-in-part of U.S. Ser. No. 07/846,349 (ABN), filed Mar. 5, 1992. The entire text and figures of the above-referenced disclosures are specifically incorporated herein by reference without disclaimer.

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ART-UNIT: 162

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ASSISTANT-EXAMINER: Bansal; Geetha P.

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* ABSTRACT:

Disclosed are various compositions and methods for use in achieving specific blood coagulation. This is exemplified by the specific in vivo coagulation of tumor vasculature, causing tumor regression, through the site-specific delivery of a coagulant using a bispecific antibody.

103 Claims, 11 Drawing figures

L19: Entry 20 of 39

File: USPT

Dec 28, 1999

DOCUMENT-IDENTIFIER: US 6008319 A

TITLE: Vasopermeability enhancing peptide of human interleukin-2 and

immunoconjugates thereof

CLAIMS:

- 1. An isolated and purified vasoactive <u>peptide</u>, <u>said peptide</u> comprising a <u>fragment</u> of interleukin-2 containing amino acids 37 to 58 of SEQ ID NO: 3, wherein <u>said</u> <u>fragment and said peptide</u> are substantially free of cytokine activity, and enhance vascular permeability when localized at a target site.
- 2. A dimer of the vasoactive peptide of claim 1.
- 3. The $\underline{peptide}$ of claim 1 consisting of residues 37 to 58 of amino acid sequence SEQ SEQ ID NO: 3.
- 4. The peptide of claim 1 consisting of amino acid sequence SEQ ID NO: 1.
- 5. The dimer of claim 2, wherein each <u>peptide</u> of the dimer includes at least one cysteine residue, wherein the cysteine residues form the dimer by a disulfide bridge.
- 6. A conjugate comprising:
- a) a delivery vehicle that localizes at the site of neoplastic tissue; and
- b) the vasoactive <u>peptide</u> of claim 1, said <u>peptide</u> being connected to said delivery vehicle.
- 7. The conjugate of claim 6, wherein the delivery vehicle is a <u>tumor</u> specific <u>monoclonal antibody</u>.
- 8. The conjugate of claim 7, wherein the <u>monoclonal antibody</u> is selected from the group consisting of a murine <u>antibody</u>, a human <u>antibody</u>, and a chimera of human and murine antibodies.
- 11. The conjugate of claim 7, wherein the $\underline{monoclonal}$ antibody is an antibody to HLA-DR antigen, nuclear histone H1, or $\underline{fibronectin}$.
- 12. A fusion protein comprising:
- a) a delivery vehicle that localizes at the site of neoplastic tissue, the vehicle having at least one terminal amino acid; and
- b) at least one vasoactive <u>peptide</u> according to claim 1, the <u>peptide</u> being joined to to at least one terminal amino acid of the delivery vehicle.
- 13. The fusion protein of claim 12 further comprising an amino acid linker joining the delivery vehicle and the vasoactive peptide.
- 14. The fusion protein of claim 12, wherein the at least one vasoactive peptide

comprises two tandemly linked vasoactive peptides.

- 15. The fusion protein of claim 14 further comprising an amino acid spacer between the two tandemly linked vasoactive peptides.
- , 16. The fusion protein of claim 12, wherein the delivery vehicle comprises at least one antigen binding domain of an immunoglobulin.
 - 17. The fusion protein of claim 12, wherein the delivery vehicle comprises a human-mouse chimeric monoclonal antibody.
 - 18. A vector for the expression of fusion protein, comprising:
 - a) a fusion protein sequence comprising;
 - 1) a delivery vehicle encoding sequence, wherein said delivery vehicle localizes at the site of neoplastic tissue, and
 - 2) a vasoactive <u>peptide</u> encoding sequence, comprising DNA encoding the vasoactive <u>peptide</u> of claim 1, said <u>peptide</u> encoding sequence having a reading frame aligned with the reading frame of said delivery vehicle encoding sequence; and
 - b) an expression vector having at least one sequence that directs expression of the fusion protein sequence in cells.
 - 20. A therapeutic kit, comprising:
 - a) a conjugate, said conjugate comprising:
 - 1) a delivery vehicle that localizes at the site of neoplastic tissue, and
 - 2) the vasoactive <u>peptide</u> of claim 1, said <u>peptide</u> being connected to said delivery vehicle; and
- b) an antineoplastic therapeutic agent.
- 21. A diagnostic kit, comprising:
- a) a conjugate, said conjugate comprising:
- 1) a delivery vehicle that localizes at the site of neoplastic tissue, and
- 2) the vasoactive <u>peptide</u> of claim 1, said <u>peptide</u> being connected to said delivery vehicle; and
- b) a tumor imaging agent.
- 22. An isolated and purified vasoactive <u>peptide</u>, <u>said peptide</u> consisting of a <u>portion</u> of SEQ ID NO: 3 from amino acid residues 22 to 72containing amino acid residues 37 to 58 of SEQ ID NO: 3, said <u>portion</u> being 22 to 51 amino acids in length.
- 23. The <u>peptide</u> of claim 22, wherein the <u>portion</u> of SEQ ID NO: 3 is selected from the group consisting of:
- a) amino acid residues 37 to 58:
- b) amino acid residues 33 to 58;
- c) amino acid residues 22-58; and

d) amino acid residues 37-72.

L19: Entry 37 of 39

File: USPT

May 30, 1995

DOCUMENT-IDENTIFIER: US 5420012 A

** See image for Certificate of Correction **

TITLE: Method for the detection of reactive conditions

CLAIMS:

- 1. A method for screening for the presence of a malignant <u>tumor</u> in a patient, comprising:
- a) determining the concentration of at least one of extra <u>domain</u> A-containing cellular <u>fibronectin</u> and its extra <u>domain</u> A sequence in a sample of plasma or serum from the patient by an immunoreaction with an <u>antibody</u> that specifically binds to the extra domain A sequence indicative of said malignant tumor; and
- b) comparing the determined concentration with an average concentration of extra domain A-containing cellular fibronectin or its extra domain A sequence in healthy patients, at least a twofold increase of extra domain A-containing cellular fibronectin or its extra domain A sequence in said sample of said patient, as compared to healthy blood donors, indicating the possible presence of said malignant tumor.
- 2. A method as claimed in claim 1, wherein the tumor is a carcinoma.

End of Result Set

L19: Entry 39 of 39

File: USPT

Jan 16, 1990

DOCUMENT-IDENTIFIER: US 4894326 A

TITLE: Monoclonal antibody defining oncofetal structure of fibronectin

CLAIMS:

- 1. An immunological binding partner defined by specifically binding with the COOH-terminal region released by cathepsin D digestion of oncofetal fibronectin but not with either normal adult fibronectin or the Hep-2 or Fib-2 fragments released by thermolysin digestion of oncofetal fibronectin.
- 2. A test kit useful for assaying the presence of oncofetal <u>fibronectin</u>, comprising one or more containers containing the immunological binding partner of claim 1.
- 6. A method of immunological detection of cells expressing oncofetal <u>fibronectin</u> comprising the steps of reacting biopsied cells with the composition of claim 4 and detecting detectable marker coupled to reacted immunological binding partner on the cells.
- 8. The method of claim 6 wherein the cells are tumor cells.
- 11. A <u>hybridoma</u> cell line capable of producing a <u>monoclonal antibody</u> capable of specifically binding with the COOH-terminal <u>region</u> released by cathepsin D digestion of oncofetal <u>fibronectin</u> but not with either normal adult <u>fibronectin</u> or the Hep-2 or Fib-2 <u>fragments</u> released by thermolysin digestion of oncofetal <u>fibronectin</u>.
- 12. Hybridoma cell line ATCC No. HB9018 according to claim 11.
- 13. A monoclonal antibody produced by the hybridoma a cell line of claim 11.
- 14. The monoclonal antibody of claim 13 coupled to a radionuclide.
- 15. In a method of detecting <u>tumor</u>-associated antigen in blood serum including the steps of contacting the serium with <u>antibody</u> directed to <u>tumor</u>-associated antigen and detecting any reaction between the <u>antibody</u> and serum antigen, the improvement comprising contacting the serum with the <u>antibody</u> of claim 13.
- 16. A test kit useful for assaying the presence of oncofetal <u>fibronectin</u>, comprising one or more containers containing the <u>monoclonal</u> antibody of claim 13.